

**MEETING OF THE BIOLOGICAL CLUB.**

ORTON HALL, December 7, 1908.

The club was called to order by the President and the minutes of the previous meeting were read and approved as read.

The President appointed as a committee to consider a change in the time of monthly meeting the following: Professors F. L. Landacre, R. F. Griggs, and Mr. Arthur L. Smith.

The following names proposed at the last meeting were elected to membership: Lionel King, Malcolm Dickey, J. L. Paxton and S. C. Kelton.

Professor Lnadacre's paper on the Origin of Cranial Ganglia of the Cat Fish, occupied the evening. In discussing this question Professor Landacre called attention particularly to the functional point of view in interpreting the cranial ganglia as contrasted with the strictly morphological point of view. From the functional point of view there are several well defined systems variously distributed throughout the cranial nerves in such a manner as to best conserve the functional needs of the organism. These are not symmetrically distributed either in the trunks of a single metameric nerve or among the various metameric nerves. But these systems can be reduced to a simple type such as that found in a spinal nerve although in the head this simple type becomes greatly modified.

The object of the work undertaken upon *Ameiurus* was to determine the exact mode of origin of these diverse elements of the cranial nerves. The following brief outline will suffice to show the principal facts brought out in the discussion: (a) The general cutaneous nerve ganglia are derived in *Ameiurus* from the lateral mass (neural crest of other types); (b) The acustico-lateralis nerves supplying the ear and lateral line organs are less homogenous in their mode of origin.

The lateris ganglia of the VIIth nerve come from the lateral mass. The VIIIth ganglion comes apparently exclusively from the auditory vesicle. The lateralis IXth comes from the auditory vesicle. The lateralis Xth comes from the post auditory placode.

The close relationship of this system to the general cutaneous is shown in the mode of origin of the lateralis VIIIth.

(c) The general communis ganglia come from the lateral mass. The special cummunis or gustatory come from the epibranchial placodes.

The ganglia from which the cranial trunks and roots arise show quite as much discreteness in their mode of origin as they do in their function and distribution both central and peripheral.

After a discussion of the paper the club was adjourned.

ARTHUR H. MCCRAY, Secy.

ORTON HALL, Jan. 18, 1909.

The club was called to order by the President, Miss Freda Detmers, and the minutes of the previous meeting were read and approved as read.

The program consisted of Reports from those present at the Baltimore Meeting, December, 1908, of the American Association for the Advancement of Science and Affiliated Societies. Prof. Osborn stated that this was probably the largest aggregation of scientific men ever gathered in the country.. Prof. Osborn reported on the meetings of the American Association of Economic Entomologists mentioning Prof. S. A. Forbes' address in which a line of work was presented which will put entomology on a wider biological basis. Of the papers given before the Entomological Society of America, he mentioned in particular that of Prof. Poulton of Oxford, England, on Mimicry in American butterflies.

Prof. Prosser gave an extended account of the geology section laying particular emphasis upon the proper recognition which Paleontology is being given in stratigraphical work.

Prof. Lazenby reported on the Darwin celebration.

Prof. Griggs stated that while in the Botany section, papers of fundamental importance were read no great stride in science was in evidence. The work consisted of a large number of papers of real though not striking scientific value.

Dr. G. D. Hubbard described the papers on geographic and physiographic work as a series of smaller contributions to the greater problems.

Mr. Herbert Osborn, Jr., gave a report of the three views of evolution as brought out at the meetings: (1) Davenport supports the theory of mutation as a predominating factor of evolution; (2) Eiganmann, of Indiana, supports the theory of the inheritance of acquired characters; (3) H. F. Osborn in his study of paleontology supports the theory of evolution by small variations.

Messrs. J. F. Zimmer and L. L. Scott gave brief reports.

Prof. Griggs, the chairman of the committee to consider a change in the time of meeting, reported that in the judgment of the committee no other night of the week seemed any more desirable than the present time, viz.: the first Monday of each month. A motion was made and carried to the effect that action on the report of the committee be laid on the table until the next meeting.

Wilbur Mikesell was elected to membership.

ARTHUR H. MCCRAY, Secy.